

Appl. No. 09/505,830  
Amdt. dated March 11, 2004  
Reply to Office action of December 31, 2003

Amendments to the Specification:

Amend the paragraph beginning at page 5, line 6 as follows:

a' --Non-Volatile Memory circuit 20 is connected to a ~~KVG-68~~  
KGV-68 encryption device 24 which allows Non-Volatile Memory  
circuit 20 to load a crypto key with its corresponding check word  
into the encryption device 24. The encryption device is  
connected to a telemeter transmitter 26 which transmits encrypted  
telemetry data from an encryption device 24 to a ground  
station.--

Amend the paragraph beginning at page 7, line 1 as follows:

a<sup>2</sup> --At this time it should be noted that the software of  
Appendix A is adapted for processing two KGV-68 although only one  
is illustrated in FIG. 1. In a security upgrade configuration  
the software operates in a manner which allows two KGV-68  
encryption units to be loaded with a crypto key and its  
corresponding check word. It should be noted that while FIG. 1  
only shows one ~~KVG-68~~ KGV-68, the non-volatile memory comprising  
the present invention may be easily modified to accommodate to  
~~KVG-68~~ KGV-68 encryption units.

Appl. No. 09/505,830

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Amend the paragraph beginning at page 7, line 22 as follows:

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--The XMTR\_DISABLE output from microprocessor 32 is set high during initialization to disable transmitter 26.

*a3* The ENCR\_SENSE\_IN output from microprocessor 32 is set low during initialization indicating that the ~~KVG-68~~ KGV-68 encryption device 24 is not being loaded. The ENCR\_FCLK and ENCR\_FDATA outputs from microprocessor 32 are set high during initialization. The clock signal provided by microcontroller 32 at the ENCR\_FCLK output from microcontroller 32 has an active falling edge necessitating that the signal be set high during initialization of microcontroller 32. Setting the ENCR\_FDATA output from microprocessor 32 high results in "0" at the ENCR\_FDATA output of microprocessor 32.--

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Amend the ABSTRACT beginning at page 23, line 1 as follows:

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--A Non-Volatile Memory circuit ~~which functions~~ operating as an interface between a key loader and an encryption device.

~~Included in the~~ The Non-Volatile Memory circuit ~~is~~ includes a microcontroller which ~~has an EEPROM adapted for storage of~~ stores a crypto key and ~~its corresponding~~ checkword and ~~also~~ a backup crypto key and checkword. ~~Connected to the microcontroller is a~~ 4 MHz clock signal generator which supplies the master clock

Appl. No. 09/505,830

Amdt. dated March 11, 2004

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~~signal to the microcontroller. A pair of light emitting diodes~~  
~~are also connected to the microcontroller to indicate the status~~  
~~of a load of the crypto key within the microcontroller as well~~  
~~as the status of an erase of the crypto key from the~~  
~~microcontroller.~~ The microcontroller is ~~also~~ connected to the  
telemeter transmitter for ~~the~~ a missile. ~~This allows~~ allowing  
the microcontroller to turn off the transmitter during a key load  
which prevents transmission of the crypto key and ~~its~~  
~~corresponding~~ checkword. When the microcontroller completes a  
load of the crypto key ~~from its internal EEPROM~~ to the encryption  
device and upon a launch of the missile, ~~the~~ software within the  
microcontroller erases the crypto key and ~~its corresponding~~  
checkword from ~~its~~ an internal EEPROM. This prevents an enemy  
force from retrieving the crypto key and its corresponding  
checkword from the missile after launch.